

Candidate Name	Centre Number	Candidate Number
		2



GCE AS/A level

1241/01

**INFORMATION AND
COMMUNICATION TECHNOLOGY**

IT 1

INFORMATION SYSTEMS

P.M. THURSDAY, 14 January 2010

2¼ hours

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1	6	
2	8	
3	3	
4	6	
5	6	
6	6	
7	7	
8	18	
9	4	
10	16	
Total	80	

INSTRUCTIONS TO CANDIDATES

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Write your answers in the spaces provided in this booklet.

The intended marks for questions or part questions are given in brackets []. You are advised to divide your time accordingly. The total number of marks available is 80.

You are reminded of the necessity for good written communication and orderly presentation in your answers.

Quality of written communication will be assessed in question 8.

You will need to refer to the spreadsheet you have prepared to answer question 10.

SECTION A

Answer all questions

1. Data is often coded before being entered into a computer. This saves time typing in the data.

(a) Give **two** *other* advantages of encoding data before entering it into a computer. [2]

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(b) Encoding value judgements from a questionnaire can often lead to inaccurate results. Explain with the use of **two** appropriate examples why this may happen. [2x2]

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2. A school's administration system contains information about pupils. Personal details such as a pupil's contact details, are stored as well as some very personal information such as ethnicity, religion and medical information that the school might need.

(a) Describe why the data contained in this system must be kept up-to-date. [2x2]

Dotted lines for answer (a)

(b) There are a number of costs associated with keeping data up-to-date. Describe, with the aid of distinctly *different* examples, **two** such costs in relation to the school's administration system. [2x2]

Dotted lines for answer (b)

- 3. The Chief Executive of a chain of supermarkets believes that his company’s information system always provides him with good quality information. Other than *up-to-date* describe **three** characteristics of good quality information. [3]

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- 4. Banks use validation and verification methods to reduce data entry errors in their online banking systems.

- (a) Define the term *validation*. Name and describe **one** *validation* method used in online banking systems. [3]

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- (b) Define the term *verification*. Name and describe **one** *verification* method used in online banking systems. [3]

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6. A firm of solicitors' uses word processing software to produce documents. Define **each** of the following facilities offered by the software and give appropriate examples of how **each** could be used by the firm.

(a) Templates [2]

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(b) Macros [2]

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(c) Mailmerge [2]

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SECTION B

Answer all questions

- 9. Describe what is meant by simulation modelling and give **two** advantages and **one** disadvantage of using simulation models. [4]

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YOU MUST REFER TO YOUR OWN SPREADSHEET TO ANSWER THE FOLLOWING QUESTION.

IF NO SPREADSHEET EVIDENCE IS SUBMITTED THEN NO MARKS CAN BE AWARDED.

PLEASE ENSURE THAT YOU NUMBER THE PAGES OF YOUR EVIDENCE AND REFER TO THIS NUMBERING IN YOUR ANSWERS.

- 10. (a) Describe the purpose or function of **two** different formulas from *list A* and **one** from *list B*, which you have used in your spreadsheet. [6]

A: SUM, COUNT, MAX, MIN, AVERAGE, RAND

B: SINGLE IF, MULTIPLE IF, DATE, ROUND

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(b) Describe the way you used the VLOOKUP function (or its variations) in your spreadsheet, giving **one** advantage and **one** disadvantage of using such techniques for entering data into a spreadsheet. [3]

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